: JP4305424 PUBLICATION NUMBER : 28-10-92 PUBLICATION DATE : JP910098189 APPLICATION NUMBER : 03-04-91 APPLICATION DATE

(M - 1380)NO: 123 VOL: 17 : 15-03-1993 PAT: A 4305424 AB. DATE : DAINIPPON PRINTING CO LTD PATENTEE

PATENT DATE: 28-10-1992

INVENTOR : OKUNO SHIGERU; others: 01

: B29C45/76; B22D17/32; INT.CL. B29C33/38; B29C45/26

: METHOD FOR EVALUATING TITLE

OPTIMUM INJECTION MOLDING CONDITION UTILIZING FLOW ANALYSIS AND INJECTION

MOLDING APPARATUS

ABSTRACT

: PURPOSE: To provide a molding apparatus constituted so as to be capable of determining the optimum molding condition by a simple

method. CONSTITUTION: In order to perform the flow analysis of the molten material in a mold, a product shape model is divided into fine elements (S1) and a standard temporary temp. condition is set (S2) and (n) filling times are set (S3, S5). Then, flow analysis is performed to calculate the max. values of shearing stress changing timewise in the respective fine elements (S4). As a result, graphs showing the relations between filling times and the max. values of shearing stress are calculated with respect t (m) fine elements (S6) and, with respect to (m) kinds of the graphs, the filling time wherein the difference between the max.

values of shearing stress of the respective graphs is calculated to be determined as the optimum filling time (S7) and, thereafter, the evaluation of other molding conditions is

performed.